

**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2007-29092; Directorate Identifier 2007-NE-30-AD; Amendment 39-15431; AD 2008-06-19]**

**RIN 2120-AA64**

**Airworthiness Directives; Honeywell International Inc. ATF3-6 and ATF3-6A Series Turbofan Engines**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Honeywell International Inc. ATF3-6 and ATF3-6A series turbofan engines equipped with a certain part number (P/N) low pressure compressor (LPC) aft shaft. This AD requires removing from service those LPC aft shafts and installing a serviceable LPC aft shaft. This AD results from reports of eight LPC aft shafts found cracked during fluorescent penetrant inspection (FPI). We are issuing this AD to prevent uncoupling and overspeed of the low pressure turbine, which could result in uncontained engine failure and damage to the airplane.

**DATES:** This AD becomes effective [insert date 35 days after date of publication in the FEDERAL REGISTER].

**ADDRESSES:**

You can get the service information identified in this AD from Honeywell International Inc., 111 S. 34<sup>th</sup> St., Phoenix, AZ 85034-2802; Web site: <http://portal.honeywell.com/wps/portal/aero>; telephone (800) 601-3099.

The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

**FOR FURTHER INFORMATION CONTACT:** Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; e-mail: [joseph.costa@faa.gov](mailto:joseph.costa@faa.gov); telephone: (562) 627-5246; fax: (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** The FAA proposed to amend 14 CFR part 39 with a proposed AD. The proposed AD applies to Honeywell International Inc. ATF3-6 and ATF3-6A series turbofan engines equipped with a certain part numbered LPC aft shaft. We published the proposed AD in the *Federal Register* on October 5, 2007 (72 FR 56945). That action proposed to require removing LPC aft shafts, P/N 3002070-1, from service and installing serviceable LPC aft shafts.

**Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the

Docket Operations office (telephone (800) 647-5527) is provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

### **Comments**

We provided the public the opportunity to participate in the development of this AD. We received no comments on the proposal or on the determination of the cost to the public.

### **Conclusion**

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

### **Costs of Compliance**

We estimate that this AD will affect 32 ATF3-6 and ATF3-6A series turbofan engines installed on airplanes of U.S. registry. We also estimate that it will take about 40 work-hours per engine to perform the actions if unscheduled, 20 work-hours per engine if during scheduled major periodic inspection (MPI), and 1 work-hour per engine during scheduled core zone inspection (CZI). We estimate that four engines would be unscheduled, 14 engines would be scheduled at MPI, and 14 engines would be scheduled at CZI. The average labor rate is \$80 per work-hour. Required parts would cost about \$15,000 per engine. Based on these figures, we estimate the total cost of the proposed AD to U.S. operators to be \$516,320.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator.

Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary at the address listed under ADDRESSES.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:  
2008-06-19 **Honeywell International Inc. (formerly AlliedSignal Inc. and Garrett Turbine Engine Co.):** Amendment 39-15431. Docket No. FAA-2007-29092; Directorate Identifier 2007-NE-30-AD.

#### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective [insert date 35 days after date of publication in the FEDERAL REGISTER].

#### **Affected ADs**

- (b) None.

#### **Applicability**

- (c) This AD applies to Honeywell International Inc. ATF3-6-4C, ATF3-6A-3C, and ATF3-6A-4C turbofan engines equipped with part number (P/N) 3002070-1 low pressure compressor (LPC) aft shaft. These engines are installed on, but not limited to,

Dassault Aviation Fan Jet Falcon Series G (Falcon 20G/HU25), and Dassault Aviation Mystere-Falcon 200 airplanes.

### **Unsafe Condition**

(d) This AD results from reports of eight LPC aft shafts found cracked during fluorescent penetrant inspection (FPI). We are issuing this AD to prevent uncoupling and overspeed of the low pressure turbine, which could result in uncontained engine failure and damage to the airplane.

### **Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified in Table 1 and Table 2 of this AD, unless the actions have already been done.

**Table 1 – ATF3-6A-4C Turbofan Engines, LPC Aft Shaft Replacement Compliance Schedule**

<b>For ATF3-6A-4C Turbofan Engines, If the Cycles-Since-New (CSN) on the Effective Date of This AD Are:</b>	<b>Then Replace the LPC Aft Shaft:</b>
(1) 6,500 or more CSN.	Within an additional 100 cycles-in-service (CIS).
(2) 5,000 to 6,499 CSN.	Within an additional 800 CIS, but not more than 6,600 CSN, whichever occurs first.
(3) 4,000 to 4,999 CSN.	Within an additional 1,500 CIS, but not more than 5,800 CSN, whichever occurs first.
(4) Fewer than 4,000 CSN.	Within an additional 2,000 CIS, but not more than 5,500 CSN, whichever occurs first.

**Table 2 – ATF3-6-4C and ATF3-6A-3C Turbofan Engines, LPC Aft Shaft**

**Replacement Compliance Schedule**

<b>For ATF3-6-4C and ATF3-6A-3C Turbofan Engines, If the CSN on the Effective Date of This AD Are:</b>	<b>Then Replace the LPC Aft Shaft:</b>
(1) 4,400 or more CSN.	Within an additional 100 CIS.
(2) 3,600 to 4,399 CSN.	Within an additional 500 CIS, but not more than 4,500 CSN, whichever occurs first.
(3) 3,300 to 3,599 CSN.	Within an additional 700 CIS, but not more than 4,100 CSN, whichever occurs first.
(4) Fewer than 3,300 CSN.	Within an additional 1,000 CIS, but not more than 4,000 CSN, whichever occurs first.

**LPC Aft Shaft Replacement**

(f) Using the compliance schedule in Table 1 or Table 2 of this AD as applicable, remove the LPC aft shaft, P/N 3002070-1, from service, and install a serviceable LPC aft shaft.

**Definition**

(g) For the purpose of this AD, a serviceable LPC aft shaft is an aft shaft with a P/N not referenced in this AD.

**Alternative Methods of Compliance**

(h) The Manager, Los Angeles Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

**Related Information**

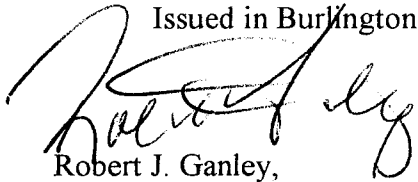
(i) Honeywell International Inc. Service Bulletin No. ATF3-72-6240, Revision 1, dated May 14, 2007, pertains to the subject of this AD.

(j) Contact Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood CA 90712-4137; e-mail: [joseph.costa@faa.gov](mailto:joseph.costa@faa.gov); telephone: (562) 627-5246; fax: (562) 627-5210, for more information about this AD.

**Material Incorporated by Reference**

(k) None.

Issued in Burlington, Massachusetts, on March 10, 2008.

A handwritten signature in black ink, appearing to read "Robert J. Ganley", is written over the printed name.

Robert J. Ganley,  
Acting Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.